Section 5. Risk Assessment

5.17 Economic Collapse

2014 Plan Update Changes

- Economic collapse was not profiled in the 2011 State HMP; however, for the 2014 Plan Update, economic collapse is included as a human-causeed hazard of concern for the State.
- > This hazard profile includes a detailed hazard description, location, extent, previous occurrences, probability of future occurrence, severity, warning time and secondary impacts of the economic collapse hazard.
- > Potential change in climate and its impacts on the economic collapse hazard are discussed.
- A vulnerability assessment has been completed and directly follows the hazard profile.
- ➤ The consequence analysis for the economic collapse hazard is now located in Section 9 of this Plan Update.

5.17.1 Profile

Hazard Description

Economic collapse is a breakdown in normal commerce facilitated by actions such as the destabilization of currency and/or hyperinflation, which results in social chaos or civil unrest. The term describes a variety of economic conditions from severe depressions with high unemployment and bankruptcy such as the Depression of the 1930s in the United States, to breakdowns of normal economic conditions such as hyperinflation or the effects of a sharp decline in population that causes an economic downturn. Although a true economic collapse has never occurred in the United States, the Great Depression was the closest that the United States came to suffering a true collapse.

Location

An economic collapse may impact all of New Jersey, depending on the size and scope of the collapse. An economic collapse will likely extend beyond New Jersey and will affect the entire United States. While social chaos and civil unrest will likely be concentrated in the State's urban centers, the effects of an economic collapse will extend to all segments of the population.

Extent

Economic collapse is often accompanied by social chaos and civil unrest. See Section 5.14 (Civil Unrest) for extent information regarding civil unrest.

Previous Occurrences and Losses

Two previous occurrences of economic collapse in New Jersey include the Great Recession of 2007, and the Great Depression of the 1930s. Both examples are described in the sections below.

The Great Depression

The Great Depression began when the stock market crashed on October 29, 1929, which marked the official beginning of the depression. Following the stock market crash, there was a run on the banks, forcing many



thousands of banks to close. Businesses and segments of industry were also affected. Having lost much of their own capital in either the Stock Market Crash or the bank closures, many businesses started cutting back their workers' hours or wages. In turn, consumers began to curb their spending, refraining from purchasing such things as luxury goods. This lack of consumer spending caused additional businesses to cut back wages or, more drastically, to lay off some of their workers. Even with these cuts, many businesses could not stay open and soon closed their doors, leaving all their workers unemployed (Rosenberg 2013).

The Great Depression continued through the 1930s until the bombing of Pearl Harbor and the entrance of the United States into World War II. Once the United States was involved in the war, both the United States people and industry became essential to the war effort. Weapons, artillery, ships, and airplanes were needed quickly. Men were trained to become soldiers and the women were kept on the home-front to keep the factories going. Food needed to be grown to feed the national population and to send overseas (Rosenberg 2013).

In the United States, 13 million people were unemployed, and in 1932, 34 million people belonged to a family with no regular full-time wage earner. Industrial production fell nearly 45% and homebuilding dropped by 80% between 1929 and 1932. Unemployment rates soared across the country, peaking at 80% in Toledo, Ohio. Finally, from 1929 through 1933 the stock market lost approximately 90% of its value.

Before the Depression, New Jersey was experiencing the prosperity felt throughout the country in the 1920s. Developments such as the Camden-Philadelphia Bridge and Bell Laboratories brought many people a sense of hope for the future. The Wright Aeronautical Company opened in Paterson, New Jersey, and the Newark Airport opened in 1928. However, this progress came crashing down with the onset of the Great Depression. New Jersey was severely hit when thousands of workers were laid off and had to rely on relief checks to survive. The impacted factories could not sell what they produced. The State attempted to aid the unemployed by establishing the Emergency Relief Administration, which gave \$10 million to bankrupt areas. Franklin D. Roosevelt's Works Progress Administration (WPA) was a significant program in the New Deal that helped New Jersey succeed in establishing a strong workforce. WPA workers helped to improve roads, buildings, and other facilities and work from writers and artists aided in preserving the history of the time period (Kiefer 2005).

Great Recession 2007

The Great Recession of 2007 affected the global economy and is the most recent example of a financial crisis affecting New Jersey. The official time period of the recession occurred from December 2007 through June 2009; however, the effects of the recession continue to linger to the present. While the specific triggers of the recession have been debated, a combination of bursting of the United States housing bubble and subsequent foreclosures, subprime lending, mortgage fraud, predatory lending, high private debt limits, and mortgage underwriting are all cited as triggers that contributed to the financial crisis.

In the United States, the effects of the Great Recession were severe and far-reaching. The gross domestic product (GDP) contracted nearly \$850 billion or 5.5% below its potential level, from 2008 through 2010 (FRED 2013). The unemployment rate rose from its pre-recession level of 5% to over 10% at its peak late in 2009 (FRED 2013). The number of unemployed individuals in the United States rose to 15 million at its peak in 2009, up from 7 million at the pre-crisis level (FRED 2013). The housing market was particularly hard hit as housing prices fell approximately 30% from their peak in mid-2006 (FRED 2013). Additionally, the stock market was affected as the Standard & Poor's (S&P) 500 index fell 57% from the October 2007 peak of 1,565, to a low of 676 in March 2009. Stock prices rose to pre-recession peak levels in April 2013.



New Jersey's recession began in January 2008, one month after it started nationally, and lasted through July 2009. The State lost 161,300 jobs, or 4% of its employment base. During the recession's first year, the State and national job bases declined at the same rate, but since 2009, the Garden State has shed jobs at a slower pace: 1.8% compared to the 2.9% national rate. With the deepening recession, New Jersey's unemployment rate increased sharply, from 4.5% in December 2007 to 6.8% 1 year later, and to 9.8% in September 2009. At the same time, growth in personal income fell, from 5.7% in 2007 to 3.2% in 2008 (Manas 2009). The Great Recession also led to a significant tightening of the State budget. In fact, in 2009 New Jersey had a budget gap of \$9 billion, or roughly 25% of the State's budget (Deitz et al. 2010). It is forecasted that it will take until 2019 for New Jersey to fully recover from the recession (Manas 2009). Although this recession has adversely affected the State, its effects pale in comparison to the Great Depression of the 1930s.

While both the Great Recession and the Great Depression do not represent true economic collapses, these examples illustrate the closest the United States or New Jersey has come to economic collapse. The results of a true economic collapse would be much more severe than the effects experienced during these past occurrences.

Probability of Future Occurrences

The probability of an economic collapse is low, especially in New Jersey and in the United States as a whole. Although it was the closest the United States has come to a complete economic collapse, the Great Depression of the 1930s was not an economic collapse in the true sense of the definition.

Severity

Events that include characteristics of economic collapse can range in severity from severe recessions (2007) and depressions (1930s) to complete economic failure. A complete economic collapse is characterized by hyperinflation, high unemployment rates, and societal breakdown. As mentioned, a complete economic collapse has never occurred in the United States.

Warning Time

Economic collapses can occur quickly with relatively little warning (such as Black Tuesday); however, many experts believe they are able to recognize and warn against the signs of an economic collapse. Social disruption such as coups and wars can trigger an economic collapse to quickly follow.

Secondary Hazards

Civil unrest is one of the primary secondary effects of economic collapse. During periods of economic instability, societal conditions may deteriorate, leading to civil unrest. Additionally, during or near economic collapses workers may go on strike, as did the ditch diggers who went on strike in New Jersey during the Great Depression.

Another secondary hazard during economic collapse is pandemic. Because many families are unable to meet basic hygiene needs, diseases historically spread quickly through communities. During the Great Depression, the spread of tuberculosis significantly impacted large segments of the population.

Climate Change Impacts

Because economic collapse is a non-natural hazard, no climate change impacts are associated with the hazard.

5.17.2 Vulnerability Assessment

The following discusses New Jersey's vulnerability, in a qualitative nature, to the economic collapse hazard. A consequence analysis for this hazard was also conducted and presented in Section 9. Impacts on the public, responders, continuity of operations, and delivery of services; property, facilities, and infrastructure; and the environment, economic condition of the state, and the public confidence in the State's governance are discussed in Section 9 in accordance with EMAP standards. This section addresses assessing vulnerability and estimating potential losses by jurisdiction and to state facilities.

Assessing Vulnerability by Jurisdiction

Because an economic collapse would affect all segments of the population, all New Jersey residents are vulnerable to the impact of this hazard. Although all of the population would be affected, the very young and elderly would be more vulnerable to the secondary hazard of pandemic than the rest of the population. Also, very young and elderly residents are vulnerable to the effects of malnutrition, which often results during these incidents. Aside from the health effects during economic collapse, lower-income individuals who struggle to cover average costs of living during thriving financial times would be greatly affected by economic collapse and would therefore be more vulnerable.

Assessing Vulnerability to State Facilities

All of New Jersey's state-owned and leased facilities are vulnerable to the indirect effects of economic collapse. During an economic collapse, maintaining day-to-day functionality of New Jersey's state-owned and leased facilities would be challenging. Buildings may become deteriorated and unusable because of a lack of maintenance budget and/or civil unrest. Also, continuity of government operations may be challenging because of absentee staff.

Critical facilities are also exposed to the effects of economic collapse. Maintaining these facilities and infrastructure systems will be particular challenging when agencies managing these facilities lose operating capital, and thus cannot maintain the facilities. This may lead to critical infrastructure failure. Whether they are privately or publicly owned, all critical facilities will be vulnerable to economic collapse.

Estimating Potential Losses by Jurisdiction

The entire New Jersey economy is exposed to the effects of economic collapse. In today's global economy, New Jersey's economy is vulnerable to collapse, and the effects of financial collapses of governments around the world. The Great Recession demonstrated how economic conditions in one nation affect others around the world, demonstrating that counties and sub-national governments are vulnerable to the effects of economic collapse. The Great Recession also illustrated the ways in which state governments are vulnerable. During the most recent recession, New Jersey experienced a \$9 million budget shortfall. Also, it is apparent the economic recovery can take years, even decades; as of 2013, the United States is still recovering from the Great Recession.

Estimating Potential Losses to State Facilities

The potential losses to State facilities caused by an economic collapse are difficult to quantify. A total risk exposure approach can be used. Refer to Table 5.1-2 in Section 5.1 (Risk Assessment Overview), which lists the replacement cost value of each State-owned and leased building.



Environmental Impacts

Economic collapse events do not generally impact the natural environment, except where governments short of tax revenue funding are unable to enforce environmental protection regulations.